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ARG56374
anti-PSTPIP1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PSTPIP1
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PSTPIP1
Species	Human
Immunogen	Recombinant protein of Human PSTPIP1
Conjugation	Un-conjugated
Alternate Names	CD2BP1; Proline-serine-threonine phosphatase-interacting protein 1; CD2BP1L; CD2-binding protein 1; PSTPIP; PAPAS; CD2BP1S; H-PIP; PEST phosphatase-interacting protein 1

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: THP-1

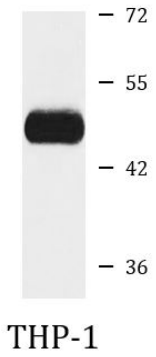
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 19200 Mouse GeneID: 9051 Human Swiss-port # O43586 Human Swiss-port # P97814 Mouse
Gene Symbol	PSTPIP1
Gene Full Name	proline-serine-threonine phosphatase interacting protein 1
Background	The protein encoded by this gene binds to the cytoplasmic tail of CD2, an effector of T cell activation and adhesion, negatively affecting CD2-triggered T cell activation. The encoded protein appears to be a scaffold protein and a regulator of the actin cytoskeleton. It has also been shown to bind ABL1, PTPN18, WAS, CD2AP, and PTPN12. Mutations in this gene are a cause of PAPA syndrome. [provided by RefSeq, Jul 2008]
Function	Involved in regulation of the actin cytoskeleton. May regulate WAS actin-bundling activity. Bridges the interaction between ABL1 and PTPN18 leading to ABL1 dephosphorylation. May play a role as a scaffold protein between PTPN12 and WAS and allow PTPN12 to dephosphorylate WAS. Has the potential to physically couple CD2 and CD2AP to WAS. Acts downstream of CD2 and CD2AP to recruit WAS to the T-cell:APC contact site so as to promote the actin polymerization required for synapse induction during T-cell activation (By similarity). Down-regulates CD2-stimulated adhesion through the coupling of PTPN12 to CD2. Also has a role in innate immunity and the inflammatory response. Recruited to inflammasomes by MEFV. Induces formation of pyroptosomes, large supramolecular structures composed of oligomerized PYCARD dimers which form prior to inflammatory apoptosis. Binding to MEFV allows MEFV to bind to PYCARD and facilitates pyroptosome formation. Regulates endocytosis and cell migration in neutrophils. [UniProt]
Calculated Mw	48 kDa
PTM	Dephosphorylated on Tyr-345 by PTPN18, this event negatively regulates the association of PSTPIP1 with SH2 domain-containing proteins as tyrosine kinase. Phosphorylation of Tyr-345 is probably required for subsequent phosphorylation at other tyrosine residues. Phosphorylation is induced by activation of the EGFR and PDGFR in a ABL1 dependent manner. The phosphorylation regulates the interaction with WAS and with MEFV (By similarity).

Images



ARG56374 anti-PSTPIP1 antibody WB image

Western blot: THP-1 cell lysate stained with ARG56374 anti-PSTPIP1 antibody.